#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start		Rating ** A				4	
LM End	Issue Type + Ma Location * N/				N/A		
Category	Earthen Levee			GPS La	atituc	le/Longitude	
				Start		End	
Item Operations & Maintenance Manuals				0		0	
					0		0
DWR ID	DWR_RD2	089_01_s _ 201	3_4				
		Action/	Comme	nts			
Inspector (	Comments	: The O&M M	anual is	available a	t the	LMA's office	٠.

No Photos

Rating \*\* Issue No. LM Start 15 LM End Issue Type + Ма Location \* N/A Earthen Levee GPS Latitude/Longitude Category End Start **Emergency Supplies &** Item Equipment DWR ID DWR\_RD2089\_01\_s \_ 2013\_15 Action/Comments

No Photos

Inspector Comments: The LMA has flood fighting supplies on-site.

LM Start	Rating ** A			Issue No.	34			
LM End		Issue Type +	Ма	Location *		N/A		
Category	Earthen L	GPS Latitude/Longitude						
Calegory		Start		End				
Item	Flood Pre		0		0			
Item			0		0			
DWR ID	DWR_RD2089_01_s _ 2013_34							
	Action/Comments							

Inspector Comments: The LMA has flood fight training and an

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

emergency plan.

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.04	Rating **	М	Issue No.	1		
LM End	0.04	Issue Type +	Ма	Location *	LS		
Catagony	Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Encroachi	ments		37.81147	'4 °	37.811474	0
item			-121.38557	'3 °	-121.385573	0	
DWR ID	DWR_RD2089_01_s _ 2012_1						
Action/Comments							

#### Stairway

Inspector Comments: Steps have been cut into the levee slope, this could become an erosion point, please fill and compact.



View of the stairs eroding into the landside levee slope.

LM Start	0.05	Rating **	М	Issue No.		42	
LM End	0.13	Issue Type +	Ma	Location *		LS	
Category	GPS Latitude/Longitude						
Calegory		Start		End			
Vegetation			37.8114	18 °	37.811048	0	
iteiii			-121.3858	77 °	-121.387242	0	
DWR ID	DWR_RD2089_01_f _ 2013_42						

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.



View of the tall vegetation obstructing visibility of the landside levee slope.

LM Start	0.06	Rating **	М	Issue No.	22		
LM End	0.10	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetatio	n		37.8113	81 °	37.811201 °	
пеш				-121.3860	27 °	-121.386722 °	
DWR ID	DWR_RD2089_01_f _ 2015_22					·	
Action/Comments							

Control annual grass and weeds on the levee slopes and easements.

#### Photo 1 of 1 : FA\_2015\_RD2089\_316\_22\_20151005\_00037.jpg



View of the tall vegetation obstructing visibility of the waterside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.24	Rating **	М	Issue No.		940	
LM End	0.24	Issue Type +	Ma	Location *		LS	
Category	Earthen L		GPS Latitude/Longitude				
Calegory				Start		End	
Item	Vegetatio	Vegetation			12 °	37.810412 °	
item				-121.3891	15 °	-121.389115 °	
DWR ID	DWR_RD2	089_01_s _ 201	2_940				
		A ation/	Commo	nto			

#### Action/Comments

Remove the wild growth other than native grasses from the levee

Inspector Comments: Arundo has been trimmed back from the crown but still remains as an obstruction to the slope and obstructs visibility, needs to be removed.

#### Photo 1 of 1: FA\_2015\_RD2089\_316\_940\_20150910\_00030.jpg



The LMA is actively trying to remove the vegetation on the landside levee slope and toe.

LM Start	0.27	Rating **	U	Issue No.		12	
LM End	0.39	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	Vegetation			19 °	37.809740 °	
пеш				-121.389510 °		-121.391645 °	
DWR ID	DWR_RD2089_01_s _ 2012_12						
		Action/	Commo	ntc			

#### Action/Comments

Remove the wild growth other than native grasses from the levee

Inspector Comments: Access and visibility completely blocked. 11/10/2011 issue has not changed.

#### Photo 1 of 1: FA 2015 RD2089 316 12 20151005 00038.jpg



Thick brush and wild rose completely block access and visibility of landside slope and toe.

LM Start	0.32	Rating **	М	Issue No.		6	
LM End	0.33	Issue Type +	Ma	Location *	WS		
Category	Suppleme	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR Ero	sion Survey		37.8098	33 °	37.809833	0
пеш				-121.3902	61 °	-121.390261	0
DWR ID							
	Action/Comments						

Inspector Comments: 06/25/2015: The erosion is below a large oak tree. Vegetation is visible around the eroiosn site. [2015 Site ID:RD2089U01RM29.94]



Front view of the erosion site. Note the large tree above the erosion.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.33	Rating **	U	Issue No.		19
LM End	0.33	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End
Item	Vegetatio	n		37.8099	83 °	37.809983 °
item				-121.3906	78 °	-121.390678 °
DWR ID DWR_RD2089_01_s _ 2012_19						
		A -4:/	C	-1-		

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Bamboo completely blocks access and visibility.11/10/2011 Arundo has been trimmed back from the roadway, but still completely blocks access and visibilit to the landside slope. This plant was improperly identified as bamboo in previous inspections.

#### Photo 1 of 1: FA\_2015\_RD2089\_316\_19\_20151005\_00039.jpg



Arundo has been trimmed back from the road, but needs to be removed so that it does not obstruct visibility and access to the landside toe.

LM Start	0.37	Rating **	U	Issue No. 946		946	
LM End	0.37	Issue Type +	Ma	Location *		LS	
Category	GPS La	atitud	e/Longitude				
Calegory			Start End				
Item	Trim / Thi	n Trees		37.8098	65 °	37.809865	0
пеш				-121.3913	03 °	-121.391303	0
DWR ID DWR_RD2089_01_s _ 2012_946							
Action/Comments							

Trim trees to at least five feet above ground level.

#### Photo 1 of 1: FA\_2015\_RD2089\_316\_946\_20150910\_00031.jpg



Trees on levee slope obstruct access and visibility.

LM Start	0.41	Rating **	U	Issue No.		28	
LM End	0.46	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee				GPS Latitude/Longitude		
Category				Start		End	
Item	Vegetatio	n		37.8095	93 °	37.809507	0
пеш				-121.3919	63 °	-121.392907	0
DWR ID	DWR_RD2	089_01_s _ 201	2_28				

#### Action/Comments

Remove the wild growth other than native grasses from the levee

Inspector Comments: Vegetation is too thick to allow access and visibility.



05/24/2011 Photo shows thick dead vegetation and continuation of trees in area that are preventing access and visibility of landside slope and toe.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated C: Corrected Ob: Design & System Obsolescence

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.46	Rating **	М	Issue No.		5
LM End	0.46	Issue Type + Ma Lo		Location *		WS
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR Ero	sion Survey		37.8093	94 °	37.809394 °
пеш				-121.3927	91 °	-121.392791 °
DWR ID						

#### Action/Comments

Inspector Comments: 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The site shows loose material around the pipe crossing. The operation of the pipe might have caused an impact on the levee. [2015 Site ID:RD2089U01RM29.8]

LM Start	0.46	Rating **	М	Issue No.	5 (cont)
LM End	0.46	Issue Type +	Ma	Location *	WS



Close view of the site.

Photo 2 of 2: SJR2015\_RD2089U01RM29.8\_9.jpg



Front view of the site.

LM Start	0.48	Rating **	U	Issue No.	30		
LM End	0.48	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS Lati	tud	e/Longitude	
Category				Start	End		
Item	Vegetatio	n		37.80966	5°	37.809665	0
пеш				-121.393219	°	-121.393219	0
DWR ID	DWR_RD2	1089_01_s _ 2012_30					
	Action/Commants						

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Dead growth is too thick to allow access during flood fight situation and completely obstructs visibility of the landside toe.



05/24/2011 Dead brush is too thick to allow access and visibility of landside slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.54	0.54 Rating ** M		Issue No.		14		
LM End	0.54	Issue Type + Ma Location *		Location *		Location *		CR
Category	Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End		
Item		rface / Depres	ssions /	37.8100	87 °	37.810087 °		
пеш	Rutting			-121.39420	00°	-121.394200 °		
DWR ID DWR_RD2089_01_s _ 2012_14								
		A otion/	Commo	nto.				

#### Action/Comments

Add appropriate gravel or road base. Grade and compact. Inspector Comments: 11/10/2011 Minor depressions will cause ponding.



11/10/2011 Depressions in crown.

LM Start	0.63	Rating **	U	Issue No.		18	
LM End	0.69	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory		Start		End			
Vegetation				37.8100	48 °	37.809641	0
ILEIII		-121.3957	62 °	-121.396709	0		
DWR ID	DWR_RD2089_01_s _ 2012_18						

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: 11/10/2011 Waterside vegetation is too thick to allow access and visibility.

# Photo 1 of 1 : FA\_2015\_RD2089\_316\_18\_20150910\_00011.jpg

11/10/2011 Vegetation needs to be cleared on the upper 20' of the waterside slope.

LM Start	0.65	Rating **	U	Issue No.		31	
LM End	0.67	Issue Type +	Ma	Location *	LS		
Category	Category Earthen Levee			GPS Latitude/Long			
Category				Start		End	
Itom	Vegetatio	n		37.8099	75 °	37.809822	0
Item				-121.3961	07 °	-121.396376	0
DWR ID	DWR_RD2	089_01_s _ 201	12_31				

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Dead brush needs to be removed, too thick to allow access and obstructs visibility of levee slope and toe

#### Photo 1 of 1 : FA\_2015\_RD2089\_316\_31\_20150910\_00018.jpg



05/24/2011 Vegetation is mostly dead but needs to be removed to allow access and visibility of slope and toe.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.67	Rating **	U	Issue No.		3	
LM End	0.67	Issue Type +	Ma	Location *	ation * WS		
Catagony	Category			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.80978	30 °	37.809780 °	
пеш				-121.3962	30 °	-121.396230 °	
DWR ID							

#### Action/Comments

Inspector Comments: 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The 5-foot vertical scarp shows no significant change from the last year inspection. No new erosion activities observed. Dense white willow trees on site.

09/07/2010: It was difficult to view the erosion due to the thick Willow thickets and other vegetation at the water line. At the time of the inspection, there were no signs of repair on site. As noted during the last survey, there is a 5-foot vertical scarp along the lower slope that may be subjected to high flow velocities.

08/05/2010: Recommended for repair, per CLRO; "Erosion of this site may be subjective to rapid rates of erosion."

09/28/2009: No major change observed; 5-foot vertical scarp is immediately downstream of where berm has tapered; site is recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM29.6, LM0.60; previously rated

11/05/2008: No change observed; rodent holes on lower slope; wide levee crown. [2015 Site ID:RD2089U01RM29.61]



Front view of the site. Note the erosion is invisible because of the dense vegetation.

Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.67	Rating **	U	Issue No.		3 (cont)		
LM End	0.67	Issue Type +	Ma	Location *		WS		
Catagony	Category				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR Ero	sion Survey		37.8097	80°	37.809780	0	
пеш				-121.3962	30°	-121.396230	0	
DWR ID								

#### Action/Comments

Inspector Comments: 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The 5-foot vertical scarp shows no significant change from the last year inspection. No new erosion activities observed. Dense white willow trees on site.

09/07/2010: It was difficult to view the erosion due to the thick Willow thickets and other vegetation at the water line. At the time of the inspection, there were no signs of repair on site. As noted during the last survey, there is a 5-foot vertical scarp along the lower slope that may be subjected to high flow velocities.

08/05/2010: Recommended for repair, per CLRO; "Erosion of this site may be subjective to rapid rates of erosion."

09/28/2009: No major change observed; 5-foot vertical scarp is immediately downstream of where berm has tapered; site is recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM29.6, LM0.60; previously rated "U".

11/05/2008: No change observed; rodent holes on lower slope; wide levee crown. [2015 Site ID:RD2089U01RM29.61]



Front view of the site. The scarp is visible on the slope.

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.67	Rating **	U	Issue No.		3 (cont)
LM End	0.67	Issue Type +	Ма	Location *		WS
Supplemental			GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR Ero	sion Survey		37.80978	30°	37.809780°
пеш				-121.39623	30°	-121.396230 °
DWR ID						·

#### Action/Comments

Inspector Comments: 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The 5-foot vertical scarp shows no significant change from the last year inspection. No new erosion activities observed. Dense white willow trees on site.

09/07/2010: It was difficult to view the erosion due to the thick Willow thickets and other vegetation at the water line. At the time of the inspection, there were no signs of repair on site. As noted during the last survey, there is a 5-foot vertical scarp along the lower slope that may be subjected to high flow velocities.

08/05/2010: Recommended for repair, per CLRO; "Erosion of this site may be subjective to rapid rates of erosion."

09/28/2009: No major change observed; 5-foot vertical scarp is immediately downstream of where berm has tapered; site is recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM29.6, LM0.60; previously rated

11/05/2008: No change observed; rodent holes on lower slope; wide levee crown. [2015 Site ID:RD2089U01RM29.61]



Front view of the site.

Photo 1 of 1: FA\_2015\_RD2089\_316\_20\_20150910\_00013.jpg

LM Start	0.71	Rating **	М	Issue No.		20	
LM End	0.76	Issue Type +	Ma	Location *		LS	
Category	Category Earthen Levee			GPS Latitude/Longitude			
Category			Start		End		
Itom	Vegetatio	n		37.8095	16 °	37.808909 °	
пеш	Item			-121.3969	55 °	-121.397557 °	
DWR ID	DWR_RD2	089_01_s _ 201	2_20				
	Action/Comments						

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: 11/10/2011 Dead vegetation prohibits visibility of the landside toe.

11/10/2011 Vegetation obstructs visibility of slope and toe.

Location LS : Land Side N/A: Not Applicable CR : Crown

Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.81	Rating **	М	Issue No.	17		
LM End	0.94	Issue Type +	Ma	Location *	LS		
Catagony	Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Sta	bility		37.8083	19°	37.806453	
item				-121.3978	81 °	-121.397755	
DWR ID	DWR_RD2089_01_f _ 2014_17						
Action/Comments							

Repair slope instability.

Inspector Comments: Landside levee toe cut due to farming.



View of the vertical cut along the landside levee toe.

Photo 1 of 1: FA\_2015\_RD2089\_316\_36\_20151005\_00040.jpg

LM Start	0.83	Rating **	U	Issue No.		36	
LM End	0.88	Issue Type + Ma		Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory		Start		End			
Item	Vegetatio	n		37.8079	38 °	37.807292	٥
пеш			-121.3978	98 °	-121.397735	٥	
DWR ID	DWR_RD2089_01_s _ 2012_36						

#### Action/Comments

Trees / Woody Vegetation

Inspector Comments: Tall weeds and brush on top 20' of waterside slope obstruct visibility.

多是		Kal	het militare de	ada, a	dista.
					200
数人			N.		
	Comme Co		Mi-	09/	/29/2015

View of tall willows obstructing visibility on waterside slope.

LM Start	0.94	Rating **	М	Issue No.		33
LM End	0.94	Issue Type +	Ma	Location *	* WS	
Category Earthen Levee				GPS La	titud	e/Longitude
Calegory				Start		End
Itom	Vegetatio	n		37.80639	97 °	37.806397
Item				-121.3977	58 °	-121.397758
DWR ID	DWR_RD2	089_01_s _ 201				
			_			

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Arundo on waterside impedes visibility and access to waterside slope.



11/10/2011 Arundo on upper 20' of waterside slope.

ĺ	* Location	** Rating		+ Issue Type
	LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
	WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
	CR : Crown	U : Unacceptable	A/W: Acceptable but Monitor & Maintain	En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	<b>0.95</b> Rating ** M		Issue No.		35		
LM End	1.01	Issue Type +	Ма	Location * WS		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Itom	Vegetatio	n		37.80626	64 °	37.806083 °	
Item				-121.39796	61 °	-121.398920 °	
DWR ID	DWR_RD2089_01_s _ 2012_35						
Action/Comments							

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

#### Photo 1 of 1: FA\_2015\_RD2089\_316\_35\_20150910\_00020.jpg



Thick vegetation on upper 20' of waterside slope obstructing visibility and access.

LM Start	1.02	Rating **	М	Issue No.	956		
LM End	1.02	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		37.8060	26 °	37.806026 °	
пеш				-121.3992	06 °	-121.399206 °	
DWR ID	DWR_RD2089_01_s _ 2012_956						
Action/Comments							

Elderberries are blocking visibility and flood fight capability. Inspector Comments: Elderberry and tobacco block visibility. No Photos

1.07	Rating **	U	Issue No.	957		
1.07	Issue Type +	Ma	Location *		LS	
Earthen L	evee		GPS La	atitud	e/Longitude	
			Start		End	
Vegetatio	n		37.8058	48 °	37.805848	٥
			-121.4000	03 °	-121.400003	٥
DWR_RD2	089_01_s _ 201	12_957				
	1.07 Earthen L Vegetation	1.07 Issue Type + Earthen Levee Vegetation	1.07 Issue Type + Ma Earthen Levee	1.07         Issue Type +         Ma         Location *           Earthen Levee         GPS La           Start         Start           Vegetation         37.8058-121.4000	1.07         Issue Type +         Ma         Location *           Earthen Levee         GPS Latitud           Start           Vegetation         37.805848 °           -121.400003 °	1.07         Issue Type +         Ma         Location *         LS           Earthen Levee         GPS Latitude/Longitude           Start         End           Vegetation         37.805848         37.805848           -121.4000003         -121.4000003

Action/Comments Elderberries are blocking visibility and flood fight capability. Inspector Comments: Brush blocks access.

No Photos

LS : Land Side	N/A: Not Applicable
WS : Water Side	
OD - O	

\* Location

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	1.12	Rating **	U	Issue No.	16		
LM End	1.12	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Co	ontrol		37.80569	99 °	37.805699	٥
item				-121.4009	52 °	-121.400952	٥
DWR ID	DWR_RD2089_01_f _ 2014_16						
	Action/Comments						

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Photo 1 of 1: FA\_2015\_RD2089\_316\_16\_20150910\_00009.jpg



View of the rodent burrow on the landside levee slope.

LM Start	1.19	1.19 Rating ** A/W Issue No.			25		
LM End	1.19 Issue Type + Ma			Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		37.8056	63 °	37.805663	0
пеш				-121.4021	51 °	-121.402151	0
DWR ID	DWR_RD2	089_01_s _ 201	2_25				

#### Action/Comments

Remove the wild growth other than native grasses from the levee

Inspector Comments: Arrundo was trimmed back but may creep up the waterside levee slope if not maintained.

## Photo 1 of 1: FA\_2015\_RD2089\_316\_25\_20150910\_00015.jpg



View of the Arundo on the waterside slope obstructing visibility. LMA is actively trying to remove the wild growth.

LM Start	1.22	Rating **	М	Issue No.	43			
LM End	1.22	Issue Type +	Ma	Location *	CR			
Category	Earthen L	evee		GPS La	titud	le/Longitude		
Category				Start		End		
Item		rface / Depres	ssions /	37.80573	35 °	37.805735	0	
item	Rutting			-121.40261	14 °	-121.402614	0	
DWR ID	DWR_RD2	089_01_s _ 201				_		
	Action/Comments							

Add appropriate gravel or road base. Grade and compact. Inspector Comments: 11/10/2011 Depression needs to be filled.



11/10/2011 Depression in roadway.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	1.23	Rating **	М	Issue No.		2
LM End	1.24	Issue Type +	Ma	Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory	Category			Start		End
Item	DWR Ero	DWR Erosion Survey			80°	37.805580 °
пеш				-121.4030	10°	-121.403010 °
DWR ID						

Action/Comments

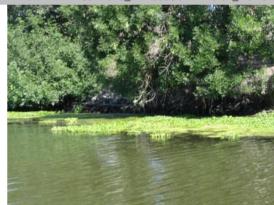
Inspector Comments: 06/25/2015: No significant change observed. 07/02/2014: No significant change observed. 08/13/2013: The erosion is around a tree at the levee toe. Dense vegetation is visible. [2015 Site ID:RD2089U01RM29.04]

LM Start	1.23	Rating **	М	Issue No.	2 (cont)
LM End	1.24	Issue Type +	Ma	Location *	WS



View of the erosion from the survey boat.

Photo 2 of 2: SJR2015\_RD2089U01RM29.04\_4.JPG



Close view of the site. Note the tree and the vegetation.

LM Start	1.23	Rating **	М	Issue No.		44
LM End	1.23	Issue Type +	Ma	Location *		LS
Category	Earthen L		GPS Latitude/Longitude			
Category			Start		End	
Item		Crown Surface / Depressions /			01 °	37.805801 °
пеш	Rutting		-121.4029	13 °	-121.402913 °	
DWR ID DWR_RD2089_01_s _ 2012_44						
Action/Comments						

Add appropriate gravel or road base. Grade and compact. Inspector Comments: 11/10/2011 Depression in roadway needs to be filled.



11/10/2011 Roadway depression.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	1.34	Rating **	М	Issue No.		45		
LM End	1.34	Issue Type +	Ма	Location *	CR			
Category	Catagoni Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End			
Item	Crown Surface / Depressions /			37.8061	28 °	37.806128 °		
пеш	Rutting			-121.4048	90°	-121.404890 °		
DWR ID DWR_RD2089_01_s _ 2012_45								
Action/Comments								

Add appropriate gravel or road base. Grade and compact. Inspector Comments: 11/10/2011 Depression needs to be filled.

#### Photo 1 of 1: FA\_2015\_RD2089\_316\_45\_20150910\_00025.jpg



11//10/2011 Roadway depression.

LM Start	1.40	Rating **	М	Issue No.		47	
LM End	1.40	Issue Type +	Ma	Location *		LS	
Category	Earthen L	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Animal Control			37.8062	68 °	37.806268	0
iteiii				-121.4058	74 °	-121.405874	0
DWR ID	DWR_RD2089_01_s _ 2012_47						

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: 11/10/2011 No rodents visible, but active burrows are present.

Photo 1 of 1 : FA_2015_RD2089_316_47_20150910_00027.jpg



11/10/2011 Active rodent burrow on landside slope.

LM Start	1.40	Rating **	М	Issue No.		46	
LM End	1.40	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category		Start		End			
Item	Encroachments			37.80626	66°	37.806266 °	
пеш			-121.40587	76 °	-121.405876 °		
DWR ID DWR_RD2089_01_s _ 2012_46							
Action/Comments							

Tree or limb

Inspector Comments: 11/10/2011 Downed tree at levee toe prevents access to levee from landside.



Decaying tree at the landside levee toe is obstructing visibility and access.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	1.40 Rating ** U			Issue No.		26	
LM End	1.40	Issue Type +	Ma	Location *		CR	
Category	evee	GPS La	titud	e/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		37.8063	06 °	37.806306°	
item				-121.4059	52 °	-121.405952 °	
DWR ID DWR_RD2089_01_f _ 2015_26							
		Action/	Commo	ntc			

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Rodent hole is at least 4 ft. deep and needs to be backfilled and compacted.



View of the rodent hole on the levee crown.

LM Start	1.44	Rating **	М	Issue No.		49	
LM End	1.44	Issue Type + Ma		Location *		WS	
Category	GPS La	titud	le/Longitude				
Calegory				Start		End	
Item	Animal Control			37.80638	33 °	37.806383	٥
пеш			-121.40659	99°	-121.406599	٥	
DWR ID DWR_RD2089_01_s _ 2012_49							

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Deep burrow on waterside needs to be filled.



11/10/2011 Deep burrow on waterside.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.07	Rating **	U	Issue No.		4	
LM End	0.07	Issue Type + Ma		Location *		WS	
Category	GPS Latitude/Longitude						
Calegory	gory			Start		End	
Item	Vegetation			37.80737	75 °	37.807375	0
пеш				-121.40860	)5 °	-121.408605	0
DWR ID DWR_RD2089_02_s _ 2012_4							

#### Action/Comments

Elderberries are blocking visibility and flood fight capability. Inspector Comments: Thick brush may include some elderberries. 05/24/2011 updated photo.

LM Start	0.07	Rating **	U	Issue No.	4 (cont)
LM End	0.07	Issue Type +	Ma	Location *	WS



05/24/2011 Updated photo of issue noted in Fall 2010 inspection.

Photo 2 of 2: FA\_2015\_RD2089\_317\_4\_20150910\_00004.jpg



Fall 2009 photo of unacceptable vegetation on levee slope.

LM Start	0.08	Rating **	М	Issue No.	19			
LM End	0.08	Issue Type +	Ma	Location *	LS			
Category	evee	GPS La	titud	le/Longitude				
Category		Start		End				
Item	Vegetatio	n		37.80748	86 °	37.807486	٥	
пеш			-121.40879	91 °	-121.408791	0		
DWR ID DWR_RD2089_02_s _ 2013_19								
	Action/Comments							

Remove the wild growth other than native grasses from the levee

Inspector Comments: Vegetation on the levee slope and toe is partially obstructive.



View of the vegetation on the landside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.16 Rating ** U Issue No.		48				
LM End	0.16	Issue Type +	Ma	Location *	LS		
Category	evee		GPS Latitude/Longitude				
Calegory			Start		End		
Itom	, Animal Control				33 °	37.808583	0
item	Item				32 °	-121.409432	0
DWR ID DWR_RD2089_02_f _ 2013_48							
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

## Photo 1 of 1 : FA\_2015\_RD2089\_317\_48\_20150910\_00031.jpg

View of the rodent burrow on the landside levee slope.

LM Start	0.21	Rating **	М	Issue No.		49	
LM End	0.21	Issue Type + Ma		Location *		LS	
Category	GPS Latitude/Longitude						
Category				Start		End	
Item	Animal Control			37.8091	48 °	37.809148	0
пеш				-121.4098	97 °	-121.409897	0
DWR ID DWR_RD2089_02_f _ 2013_49							

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.



View of the multiple rodent burrows on the landside levee hinge and slope.

LM Start	0.26	Rating **	М	Issue No.		24	
LM End	0.26	Issue Type +	Ma	Location *	LS		
Category	Earthen L	е			GPS Latitude/Longitude		
Calegory				Start		End	
Item	Animal Control			37.8097	17°	37.809717 °	
пеш				-121.4105	11 °	-121.410511 °	
DWR ID	DWR_RD2089_02_s _ 2012_24						

Action/Comments

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Ground squirrel sighted and active borrowing in area.



05/24/2011 Active burrows, ground squirrel sighted in area.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.28	Rating **	U	Issue No.		51
LM End	0.28	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Animal Co	ontrol		37.80989	99°	37.809899°
item				-121.41088	39°	-121.410889 °
DWR ID DWR_RD2089_02_f _ 2013_51						
			_			

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.



View of the rodent burrow on the landside levee toe.

LM Start	0.30	Rating **	U	Issue No.		53
LM End	0.31	Issue Type +	Ma	Location *		LS
Earthen Levee				GPS La	atitud	e/Longitude
Category				Start		End
Item	Animal Co	ontrol		37.8099	77 °	37.810022
iteiii				-121.4111	89 °	-121.411387
DWR ID DWR_RD2089_02_f _ 2013_53						

#### Action/Comments

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Exterminating rodents and grouting the burrows recommended.

LM Start	0.30	Rating **	U	Issue No.	53 (cont)
LM End	0.31	Issue Type +	Ma	Location *	LS

#### Photo 1 of 3: FA\_2015\_RD2089\_317\_53\_20150910\_00035.jpg



View of the multiple rodent burrows on the landside levee slope.

Photo 2 of 3: FA\_2015\_RD2089\_317\_53\_20150910\_00036.jpg



View of the rodent burrow on the landside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.30	Rating **	U	Issue No.		53 (cont)
LM End	0.31	Issue Type +	Гуре + Ма Loca			LS
Catagoria Earthen Levee				GPS La	titud	e/Longitude
Calegory	Category					End
Item	Animal Co	ontrol		37.80997	77 °	37.810022 °
itelli				-121.41118	39°	-121.411387 °
DWR ID DWR_RD2089_02_f _ 2013_53						

#### Action/Comments

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Exterminating rodents and grouting the burrows recommended.

### Photo 3 of 3: FA\_2015\_RD2089\_317\_53\_20150910\_00037.jpg



Another view of the multiple rodent burrows on the landside levee slope.

Photo 1 of 1: FA\_2015\_RD2089\_317\_26\_20150910\_00024.jpg

LM Start	0.36	Rating **	М	Issue No.		26	
LM End	0.36	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee					le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		37.8101	25 °	37.810125 °	
пеш				-121.4123	17°	-121.412317 °	
DWR ID	WR ID DWR_RD2089_02_s _ 2012_26						

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Active burrow needs to be repaired.

05/24/2011 Active rodent burrow. Photo 1 of 1: FA\_2015\_RD2089\_317\_8\_20151005\_00041.jpg

LM Start	0.38	Rating **	U	Issue No.	8		
LM End	0.79	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS La	titud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		37.81010	)9 °	37.814363	0
пеш			-121.41261	9°	-121.414297	0	
DWR ID	DWR ID DWR_RD2089_02_s _ 2012_8						

#### Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Tobacco leaf and other brush block access and visibility.

View of tall vegetation limiting visibility and access on the levee.

Location Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable N: Not Inspected/Rated Acceptable WS: Water Side Minimally Acceptable CR : Crown U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.40	Rating **	М	Issue No.		1
LM End	0.41	Issue Type +	Ма	Location *		WS
Supplemental				GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR Eros	sion Survey		37.80996	60°	37.809960°
item			-121.41320	00°	-121.413200 °	
DWR ID						

#### Action/Comments

Inspector Comments: 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

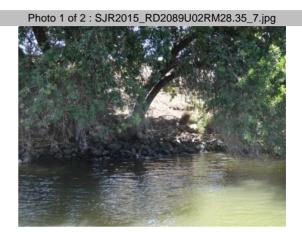
08/23/2011: No significant change observed on site.

09/07/2010: Site consists of a jutting rip rap that has created an eddy, scouring the levee slope. Most sections of the toe and lower slope are lined with rip rap. However, the rip rap is sloughing on the mid slope and at the toe, exposing the underlying soils and tree roots. The remaining revetment is no longer adequately protecting the slope. There are 3 Sycamore trees at the toe with exposed tree roots.

08/05/2010: Recommended for repair, per CLRO.

09/28/2009: Pocket erosion on lower slope just above the toe rip rap; protruding rip rap upstream is creating an eddy, scouring the levee slope; Site # is the same as RM28.40,LM0.30; previously rated "U"; pictures will be made available during the next survey.

11/05/2008: Cut into levee profile; riprap slide; rodent holes; pictures do not match GPS and current condition. [2015 Site ID:RD2089U02RM28.35]



View of the site from the survey boat.

N: Not Inspected/Rated Corrected

Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.40	Rating **	М	Issue No.		1 (cont)		
LM End	0.41	Issue Type +	Ma	Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR Ero	sion Survey		37.8099	60°	37.809960 °		
пеш				-121.4132	00°	-121.413200 °		
DWR ID								

#### Action/Comments

Inspector Comments: 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: No significant change observed on site.

09/07/2010: Site consists of a jutting rip rap that has created an eddy, scouring the levee slope. Most sections of the toe and lower slope are lined with rip rap. However, the rip rap is sloughing on the mid slope and at the toe, exposing the underlying soils and tree roots. The remaining revetment is no longer adequately protecting the slope. There are 3 Sycamore trees at the toe with exposed tree roots. 08/05/2010: Recommended for repair, per CLRO.

09/28/2009: Pocket erosion on lower slope just above the toe rip rap; protruding rip rap upstream is creating an eddy, scouring the levee slope; Site # is the same as RM28.40,LM0.30; previously rated "U"; pictures will be made available during the next survey.

11/05/2008: Cut into levee profile; riprap slide; rodent holes; pictures do not match GPS and current condition. [2015 Site ID:RD2089U02RM28.35]



View of the site from the survey boat.

LM Start	<b>0.42</b> Rating ** U			Issue No.		28		
LM End	0.65	Issue Type +	Ma	Location *	ation * WS			
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Vegetatio	n		37.8103	71 °	37.812672 °		
пеш				-121.4133	97 °	-121.415437 °		
DWR ID DWR_RD2089_02_f _ 2015_28								
Action/Comments								

Remove the wild growth other than native grasses from the levee slopes.





View of the tall vegetation obstructing visibility and access.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.46	М	Issue No.		13			
LM End	0.46	Issue Type +	Ma	Location *		CR		
Category	evee	GPS La	titud	le/Longitude				
Calegory				Start		End		
Item	Animal Co	ontrol		37.8106	91 °	37.810691 °		
item				-121.4140	14 °	-121.414014 °		
DWR ID DWR_RD2089_02_s _ 2012_13								
Action/Comments								

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.
Inspector Comments: Two old burrows that need to be filled.



11/10/2011 Two large burrows on crown, need to be filled.

LM Start	0.47	Rating **	М	Issue No.		10	
LM End	0.47	Ma	Location *	CR			
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory			Start		End		
Item	Crown Su	ssions /	37.8107	14 °	37.810714 °		
item	Rutting			-121.4140	57 °	-121.414057 °	
DWR ID DWR_RD2089_02_s _ 2012_10							
Action/Comments							

Add appropriate gravel or road base. Grade and compact. Inspector Comments: Surface depression needs to be filled.

## Photo 1 of 1: FA\_2015\_RD2089\_317\_10\_20150910\_00011.jpg



11/10/2011 Depression in crown needs to be filled.

LM Start	0.50	Issue No.		54		
LM End	0.50 Issue Type + Ma		Ma	Location *		LS
Category	evee	GPS Lat	itud	e/Longitude		
Calegory			Start		End	
Item	Animal Co	ontrol		37.81098	9°	37.810989 °
item				-121.41451	7 °	-121.414517 °
DWR ID DWR_RD2089_02_f _ 2013_54						
		A - 1' 1	<u> </u>			

Action/Comments Exterminate rodents and backfill and compact or grout burrows.



View of the rodent burrow on the landside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.52	Issue No.		14			
LM End	0.52 Issue Type + Ma			Location *	ocation * WS		
Category Earthen Levee				GPS La	titud	le/Longitude	
				Start		End	
Item	Animal Co	ontrol		37.81118	50 °	37.811150	
пеш				-121.41474	48 °	-121.414748	
DWR ID DWR_RD2089_02_s _ 2012_14							
Action/Comments							

Repair the levee slope damaged by livestock and prevent large animal

Inspector Comments: 11/10/2011 Repair damage to slope caused by livestock.



11/10/2011 Approximately 1' scarp has been created by livestock travel.

LM Start	0.54	М	Issue No.	35			
LM End	0.54 Issue Type + Ma			Location *		CR	
Category	evee	GPS La	atitud	le/Longitude			
Calegory	gory					End	
Item	Crown Su	rface / Depres	ssions /	37.8113	82 °	37.811382 °	
пеш	Rutting			-121.4150	54°	-121.415054 °	
DWR ID DWR_RD2089_02_f _ 2015_35							
Action/Comments							

Repair depressions or ruts in the crown or slope.

LM Start	0.54	Rating **	М	Issue No.	35 (cont)
LM End	0.54	Issue Type +	Ma	Location *	CR



View of the levee crown depression looking upstream.

Photo 2 of 4: FA\_2015\_RD2089\_317\_35\_20151005\_00045.jpg



View of the levee crown depression looking downstream.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.54	Rating **	М	Issue No.	35 (cont)		
LM End	0.54	Issue Type +	Ма	Location *	CR		
Category Earthen Levee				GPS La	titud	le/Longitude	
Calegory				Start		End	
Item		Crown Surface / Depressions / Rutting			82 °	37.811382 °	
iteiii	Rutting				54 °	-121.415054 °	
DWR ID DWR_RD2089_02_f _ 2015_35							
		Action/	Comme	nts			
Repair dep	ressions o	or ruts in the c	rown or	slope.			

LM Start	0.54	Rating **	M	Issue No.	35 (cont)
LM End	0.54	Issue Type +	Ma	Location *	CR

Photo 3 of 4: FA\_2015\_RD2089\_317\_35\_20151005\_00046.jpg

View of the levee crown depression looking to the landside.

09/29/2015

Photo 4 of 4: FA\_2015\_RD2089\_317\_35\_20151005\_00047.jpg



View of the levee crown depression looking to the waterside.

LM Start	0.77	Rating **	М	Issue No.	15			
LM End	0.77	Issue Type +	Ma	Location *	LS			
Category	Earthen L	arthen Levee GPS Latitu				ude/Longitude		
Calegory	ny			Start		End		
Item	Erosion / Bank Caving			37.813969 °		37.813969 °		
item				-121.414324 °		-121.414324 °		
DWR ID	DWR_RD2	089_02_f _ 201	4_15					
		Action/	Comme	nts				
Schedule repair of erosion site prior to the next inspection.								



View of the scour from surface runoff on the landside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.80	Rating **	U	Issue No.		36		
LM End	0.84	Issue Type +	Ma	Location *		LS		
Catagoni Earthen Levee			GPS Latitude/Longitude					
Category			Start		End			
Itom	ltem Vegetation			37.814421 °		37.814913 °		
item				-121.414203 °		-121.414594°		
DWR ID DWR_RD2089_02_s _ 2012_36								
	A stirry (Correspondent							

#### Action/Comments

Remove the wild growth other than native grasses from the levee

Inspector Comments: Wild growth and dead underbrush prevents visibility of levee slope and area cannot be accessed if needed for a flood fight.



Extremely thick dead brush prevents access and visibility.

LM Start	0.83	Rating **	М	Issue No.		21	
LM End	0.83	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory						End	
Item	Animal Co	Animal Control		37.814773 °		37.814773 °	
пеш				-121.414555 °		-121.414555 °	
DWR ID	DWR_RD2	089_02_s _ 201	2_21				

#### Action/Comments

Repair the levee slope damaged by livestock and prevent large animal access.

Inspector Comments: Livestock have worn paths into levee slope.

No Photos

LM Start	0.83	Rating **	М	Issue No.		38	
LM End	0.83	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee	GPS Latitude/Longitude				
Category				Start		End	
Item	Animal Co	ontrol		37.8148	44 °	37.814844	0
Item				-121.4145	66°	-121.414566	0
DWR ID	DWR_RD2	089_02_s _ 201	2_38				

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Active burrows present.

No Photos

LS: Land Side N/A: Not Applicable A: Acceptable N: Not Inspected/Rat	ated
WS: Water Side M: Minimally Acceptable C: Corrected	
CR : Crown U : Unacceptable A/W : Acceptable but Mo	lonitor & Maintain

Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.84	Rating **	М	Issue No.		25	
LM End	0.84	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Calegory		Start		End			
Item	Vegetatio	n		37.8149	06 °	37.814906	0
item					45 °	-121.414745	0
DWR ID	DWR_RD2089_02_s _ 2012_25						
		Action/	Commo	ntc			

Elderberries are blocking visibility and flood fight capability. Inspector Comments: Elderberry and blackberry on levee slope. No Photos

LM Start	0.85	Rating **	U	Issue No.		40
LM End	0.90	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	titud	le/Longitude
Calegory		Start		End		
Item	Animal Co	ontrol		37.81499	)7 °	37.814970 °
Item				-121.41477	'4 °	-121.415767 °
DWR ID DWR_RD2089_02_s _ 2012_40						
		Action/	Commo	ntc		

#### Action/Comments

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Numerous burrows on landside slope adjacent to hay storage area. Deep burrows in crown and landside ramp.

LM Start	0.85	Rating **	U	Issue No.	40 (cont)
LM End	0.90	Issue Type +	Ma	Location *	LS

#### Photo 1 of 3: FA\_2015\_RD2089\_317\_40\_20150910\_00028.jpg



05/24/2011 Deep vertical burrow in ramp on land side of levee.

Photo 2 of 3: FA\_2015\_RD2089\_317\_40\_20150910\_00029.jpg



05/24/2011 Deep vertical burrow in levee crown.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.85	Rating **	U	Issue No.		40 (cont)
LM End	0.90	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Animal Co	ontrol		37.8149	97 °	37.814970 °
item					74 °	-121.415767 °
DWR ID	R ID DWR_RD2089_02_s _ 2012_40					
		A ation/	Commo	nto		

#### Action/Comments

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Numerous burrows on landside slope adjacent to hay storage area. Deep burrows in crown and landside ramp.

#### Photo 3 of 3: FA\_2015\_RD2089\_317\_40\_20151005\_00043.jpg



View of the multiple rodent holes on the landside levee slope.

LM Start	0.91	Rating **	М	Issue No.		22	
LM End	0.91	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	Animal Control			37.81490	)3 °	37.814903	٥
пеш				-121.41588	37 °	-121.415887	0
DWR ID DWR_RD2089_02_s _ 2015_22							

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

LM Start	0.94	Rating **	M	M Issue No.		41		
LM End	0.94	Issue Type +	Ma	Location *	ation * WS			
Category Earthen Levee				GPS Latitude/Longitude				
Category	Category				Start			
Item	Encroach	ments		37.8149	40 °	37.814940	0	
пеш	item				99°	-121.416499	0	
DWR ID DWR_RD2089_02_s _ 2012_41								
Action/Comments								

#### Pipe

Inspector Comments: Debris/CMP on levee slope needs to be removed.



05/24/2011 Old CMP left on waterside levee slope, needs to be removed.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable CR : Corrected U : Unacceptable U : Unacceptable U : M : Acceptable WS : Acceptable U : Unacceptable U : Unacc

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	0.95	Rating **	U	Issue No.		5	
LM End	0.95	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	egory				Start		
Item	Animal Co	ontrol		37.8149 <sup>-</sup>	15 °	37.814915	0
item				-121.41660	06°	-121.416606	0
DWR ID DWR_RD2089_02_s _ 2014_5							
Action/Comments							

Exterminate rodents and backfill and compact or grout burrows.

## Photo 1 of 1: FA\_2015\_RD2089\_317\_5\_20150910\_00005.jpg



View of the rodent holes on the landside levee slope.

LM Start	1.00	Rating **	U	Issue No.		12
LM End	1.00	Issue Type +	Ma	Location *		CR
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Animal Co	ontrol		37.8151	82 °	37.815182 °
пеш				-121.4174	39°	-121.417439 °
DWR ID	DWR_RD2089_02_f _ 2014_12					

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Photo 1 of 2 : FA_2015_RD2089_317_12_2	20150910_00013.jpg
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View of several large rodent holes on the levee crown.

LM Start	1.00	Rating **	U	Issue No.	12 (cont)
LM End	1.00	Issue Type +	Ma	Location *	CR

Photo 2 of 2: FA\_2015\_RD2089\_317\_12\_20150910\_00014.jpg



View of several rodent burrows on landside levee hinge and crown.

Location Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A : Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS: Water Side CR : Crown U : Unacceptable A/W: Acceptable but Monitor & Maintain En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	1.05	Rating **	N	Issue No.	29				
LM End	1.05	Issue Type +	Ma	Location *	WS				
Catagory	Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End			
Item	Trim / Thin Trees			37.8156	29 °	37.815629			
пеш			-121.4181	33 °	-121.418133				
DWR ID	DWR_RD2089_02_s _ 2012_29								
Action/Comments									

#### Tree stumps.

Inspector Comments: 14" dia stump. Could not verify as the area is overgrown with high weeds.



Tree stump >2" left after vegetation and tree removal.

LM Start	1.09	Rating **	М	Issue No.		17			
LM End	1.09	Issue Type +	Ma	Location *		a Location *		WS	
Category	evee	GPS Latitude/Longitude							
Calegory		Start		End					
Item	Encroachi	37.8161	00 °	37.816100	٥				
item		-121.4184	87 °	-121.418487	0				
DWR ID	DWR_RD2089_02_s _ 2012_17								

#### Action/Comments

#### Debris

Inspector Comments: Water tanks disposed of on levee are obstructive.



View of water tanks disposed on waterside slope.

LM Start	1.12	Rating **	М	Issue No.	30			
LM End	1.12	Issue Type +	Ma	Location *		WS		
Category	Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End			
Item	Vegetation			37.81648	37 °	37.816487 °		
пеш				-121.41894	18 °	-121.418948 °		
DWR ID	DWR ID DWR_RD2089_02_s _ 2012_30							
	Action/Comments							
			1.0	10.14				

Elderberries are blocking visibility and flood fight capability.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	1.18 Rating ** M		Issue No.		6		
LM End	1.18	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory		Start		End			
Item	Animal Co	Animal Control			71 °	37.817271	٥
item		-121.4193	80 °	-121.419380	٥		
DWR ID	DWR_RD2089_02_s _ 2014_6						
		Action/	Commo	ntc			

Exterminate rodents and backfill and compact or grout burrows.

Photo 1 of 1: FA\_2015\_RD2089\_317\_6\_20150910\_00006.jpg



View of the large rodent hole on the landside levee slope.

LM Start	1.24	Rating **	М	Issue No.	31		
LM End	1.24	Issue Type +	Ма	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Vegetation				37.8180	51 °	37.818051	0
пеш			-121.41974	43 °	-121.419743 °	0	
DWR ID	DWR_RD2089_02_s _ 2012_31						

Action/Comments

Elderberries are blocking visibility and flood fight capability.

No Photos

LM Start	1.29	Rating **	М	Issue No.	32			
LM End	1.29	Issue Type +	Ma	Location *		WS	S	
Category	Earthen L	GPS Latitude/Longitude						
				Start		End		
Item	Vegetation			37.8188	29°	37.818829	0	
item				-121.4197	76°	-121.419776	0	
DWR ID	DWR_RD2089_02_s _ 2012_32							
Action/Comments								

Elderberries are blocking visibility and flood fight capability.

No Photos

N : Not Inspected/Rated A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	09/29/2015 09/29/2015	Maksim Khashchuk

LM Start	1.30	Rating **	М	Issue No.	16	
LM End	1.30	Issue Type +	Ma	Location *		LS
Category	Earthen L	GPS Latitude/Longitude				
Calegory			Start		End	
Item	Animal Co	ontrol	37.8189	87 °	37.818987 °	
пеш				-121.4197	67°	-121.419767 °
DWR ID	DWR_RD2	089_02_s _ 201	15_16			
		Action/	Comme	nts		
Exterminat	te rodents	and backfill a	nd comp	act or grou	t bur	rows.

No Photos

LM Start	1.33	Rating **	U	Issue No.	11				
LM End	1.33	Issue Type +	Ма	Location *	LS				
Catagory	Category Earthen Levee				GPS Latitude/Longitude				
Category		Start		End					
Item	Animal Co	nimal Control			'1 °	37.819371	0		
пеш			-121.41977	'4 °	-121.419774	0			
DWR ID	DWR_RD2	089_02_f _ 201	4_11						
Action/Comments									

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Photo 1 of 1: FA\_2015\_RD2089\_317\_11\_20150910\_00012.jpg



View of the multiple rodent burrows on the landside levee slope.

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement